

EUROPEAN COMMISSION

> Brussels, XXX [...](2022) XXX draft

ANNEXES 1 to 3

ANNEXES

to the

COMMISSION DELEGATED REGULATION

supplementing Regulation (EU) No 1308/2013 of the European Parliament and of the Council as regards marketing standards for olive oil, and repealing Regulation (EEC) No 2568/91 and Implementing Regulation (EU) No 29/2012

ANNEX I

CHARACTERISTICS OF OLIVE OIL

A. Quality characteristics

Category	Acidity	Peroxide	K232	K ₂₆₈ or	ΔΚ	Organoleptic charac	teristics	Fatty acid ethyl
	(%)(*)	value (mEq O ₂ /kg)		K270		Median of defect (Md) ^{(*)(1)}	Fruity median (Mf) ⁽²⁾	esters (mg/kg)
1. Extra virgin olive oil	≤ 0,80	≤ 20,0	≤ 2,50	≤ 0,22	≤ 0,01	Md = 0,0	Mf > 0,0	≤ 35
2. Virgin olive oil	≤2,0	≤ 20,0	≤2,60	≤ 0,25	≤ 0,01	Md ≤ 3,5	Mf > 0,0	
3. Lampante olive oil	> 2,0					Md > 3,5 ⁽³⁾		
4. Refined olive oil	≤ 0,30	≤ 5,0		≤ 1,25	≤ 0,16			
5. Olive oil composed of refined olive oil and virgin olive oils		≤ 15,0		≤ 1,15	≤ 0,15			
6. Crude olive- pomace oil		_						
7. Refined olive- pomace oil	≤ 0,30	≤ 5,0		≤ 2,00	≤ 0,20			
8. Olive-pomace oil	≤ 1,00	≤ 15,0		≤ 1,70	≤0,18			

(1) The median of the defects is defined as the median of the defect perceived with the greatest intensity.

(2) When the median of the bitter and/or pungent attribute is more than 5,0, the panel leader shall report this.

(3) The median of defect may be less than or equal to 3,5 when the fruity median is equal to 0,0.

B. Purity characteristics

Category	Fatty aci	Fatty acid composition ⁽¹⁾							Stigmasta	AECN42	2-glyceryl
	Myristic	Linolenic	Arachidic	Eicosenoic	Behenic	Lignoceric	transoleic isomers	linoleic	- dienes		monopalmitate
	(%)	(%)	(%)	(%)	(%)	(%)	(%)	+ trans- linolenic isomers (%)	(mg/kg) ⁽³⁾		(%)
1. Extra virgin olive oil	tra ≤ 0.03 $\leq 1.00^{(2)}$ ≤ 0.60 ≤ 0.50 ≤ 0.20 ≤ 0.20 ≤ 0.05 ≤ 0.05	≤ 0,05	≤ 0,05	≤ 0,20	\leq 0,9 if total palmitic acid % \leq 14,00 %						
							\leq 1,0 if total palmitic acid % > 14,00 %				
2. Virgin olive oil		$\leq 1,00^{(2)} \leq 0,60$	≤ 0,60	0,60 ≤ 0,50	$\leq 0,20 \leq 0,20$	≤ 0,20	\leq 0,05	≤ 0,05	≤ 0,05	≤ 0,20	\leq 0,9 if total palmitic acid % \leq 14,00 %
											\leq 1,0 if total palmitic acid % > 14,00 %
3.Lampante olive oil	≤ 0,03	0,03 ≤ 1,00 ≤ 0,60	≤ 0,50 ≤	≤ 0,20	≤ 0,20	≤0,10	$\leq 0,10 \leq 0,10$	\leq 0,50	≤ 0,30	\leq 0,9 if total palmitic acid % \leq 14,00 %	
											\leq 1,1 if total palmitic acid % > 14,00 %
4. Refined olive oil	≤ 0,03	≤ 1,00	≤ 0,60	≤ 0,50	≤0,20	≤ 0,20	≤ 0,20	≤ 0,30		≤ 0,30	\leq 0,9 if total palmitic acid % \leq 14,00 %

											\leq 1,1 if total palmitic acid% > 14,00%
5. Olive oil composed of refined		≤ 1,00	≤ 0,60	≤ 0,50	≤ 0,20	≤ 0,20	≤ 0,20	≤ 0,30	_	≤ 0,30	$ \leq 0.9 \text{ if total} palmitic acid% \leq 14,00\% $
olive oil and virgin olive oils											$ \leq 1.0 \text{ if total} palmitic acid% > 14,00% $
6. Crude olive- pomace oil	≤ 0,03	≤ 1,00	≤ 0,60	≤ 0,50	≤ 0,30	≤ 0,20	≤ 0,20	≤ 0,10	-	≤ 0,60	≤ 1,4
7. Refined olive- pomace oil	≤ 0,03	≤ 1,00	≤ 0,60	≤ 0,50	≤ 0,30	≤ 0,20	≤ 0,40	≤ 0,35	-	≤ 0,50	≤ 1,4
8. Olive- pomace oil	≤ 0,03	≤ 1,00	≤0,60	≤ 0,50	≤ 0,30	≤ 0,20	≤ 0,40	≤ 0,35		≤ 0,50	≤ 1,2

(1) Other fatty acids content (%): palmitic: 7,00-20,00; palmitoleic: 0,30-3,50; heptadecanoic: \leq 0,40; heptadecenoic \leq 0,60; stearic: 0,50-5,00; oleic: 55,00- 85,00; linoleic: 2,50-21,00.

(2) When the linolenic acid is more than 1,00 but less than or equal 1,40, the ratio apparent β -sitosterol/campesterol has to be greater than or equal to 24.

(3) Total isomers which could (or could not) be separated by capillary column.

Category	Sterols com	position					Total	and uvaol (%) ^(**)	Waxes (mg/kg) ^(**)
	Chole- sterol (%)	Brassica -sterol (%)	Campe- sterol ⁽⁴⁾ (%)	Stigmasterol (%)	Apparent β–sito- sterol ⁽⁵⁾ (%)	$\frac{\Delta - 7 \text{-stigma-}}{\text{stenol}^{(4)}(\%)}$	sterols (mg/kg)		
1. Extra virgin olive oil	≤ 0,5	≤ 0,1	≤4,0	< Camp.	≥ 93,0	≤ 0,5	≥ 1 000	≤4,5	$\begin{array}{c} C42 + C44 + C46 \\ \leq 150 \end{array}$
2. Virgin olive oil	≤ 0,5	≤ 0,1	≤4,0	< Camp.	≥ 93,0	≤ 0,5	≥ 1 000	≤4,5	$\begin{array}{r} C42 + C44 + C46 \\ \leq 150 \end{array}$
3. Lampante olive oil	≤ 0,5	≤ 0,1	≤4,0		≥ 93,0	≤ 0,5	≥ 1 000	\leq 4,5 ⁽⁶⁾	$\begin{array}{c} C40 + C42 + C44 \\ + C46 \leq 300^{(6)} \end{array}$
4. Refined olive oil	$\leq 0,5$	≤ 0,1	≤4,0	< Camp.	≥ 93,0	\leq 0,5	≥ 1 000	$\leq 4,5^{(7)}$	$\begin{array}{c} C40 + C42 + C44 \\ + C46 \leq 350 \end{array}$
5. Olive oil composed of refined olive oil and virgin olive oils		≤ 0,1	≤4,0	< Camp.	≥ 93,0	≤ 0,5	≥1 000	≤ 4,5	$\begin{array}{c} C40 + C42 + C44 \\ + C46 \leq 350 \end{array}$
6. Crude olive-pomace oil	≤ 0,5	≤ 0,2	≤ 4,0		≥93,0	≤ 0,5	≥ 2 500	> 4,5 ⁽⁸⁾	$\begin{array}{c} C40 + C42 + C44 \\ + C46 > 350^{(8)} \end{array}$
7. Refined olive-pomace oil	≤ 0,5	≤ 0,2	≤4,0	< Camp.	≥93,0	≤ 0,5	≥ 1 800	> 4,5	C40 + C42 + C44 + C46 > 350
8. Olive- pomace oil	≤ 0,5	≤ 0,2	≤ 4,0	< Camp.	≥ 93,0	≤ 0,5	≥1 600	> 4,5	C40 + C42 + C44 + C46 > 350

- (4) See the Appendix to this Annex.
- (5) Apparent β -sitosterol: Δ -5,23-stigmastadienol+clerosterol+ β -sitosterol+sitostanol+ Δ -5-avenasterol+ Δ -5,24-stigmastadienol.
- (6) Oils with a wax content of between 300 mg/kg and 350 mg/kg are considered to be lampante olive oil if the total aliphatic alcohol content is less than or equal to 350 mg/kg or if the erythrodiol and uvaol content is less than or equal to 3,5 %.
- (7) Oils with an erythrodiol + uvaol content of between 4,5 and 6 % must have an erythrodiol content of less than or equal to 75 mg/kg.
- (8) Oils with a wax content of between 300 mg/kg and 350 mg/kg are considered to be crude olive-pomace oil if the total aliphatic alcohol content is above 350 mg/kg and if the erythrodiol and uvaol content is greater than 3,5 %.

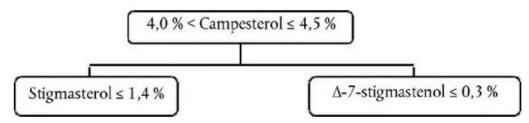
Notes:

- (a) The results of the analyses must be expressed to the same number of decimal places as used for each characteristic. The last digit must be increased by one unit if the following digit is greater than 4.
- (b) If just a single characteristic does not match the values stated, the category of an oil shall be changed or the oil shall be declared non-compliant for the purposes of this Regulation.
- (c) For lampante olive oil, both quality characteristics marked with an asterisk (*) may differ simultaneously from the limits established for that category.
- (d) If a characteristic is marked with two asterisks (**), this means that for crude olive-pomace oil, it is possible for both the relevant limits to be different from the stated values at the same time. For olive-pomace oil and refined olive-pomace oil one of the relevant limits may be different from the stated values.

Appendix

Decision trees

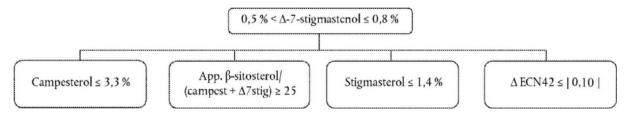
Campesterol decision tree for virgin and extra virgin olive oils:



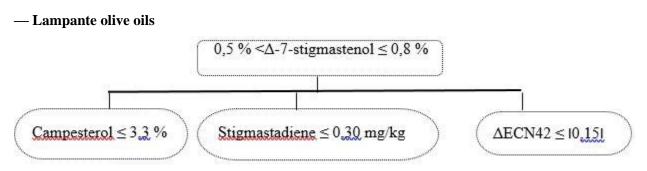
The other parameters shall comply with the limits fixed in this Regulation.

Delta-7-stigmastenol decision tree for:

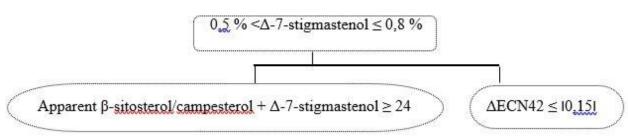
- Extra virgin and virgin olive oils



The other parameters shall comply with the limits fixed in this Regulation.



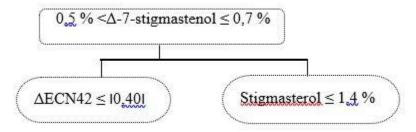
The other parameters shall comply with the limits fixed in this Regulation.



- Refined olive oils and olive oils composed of refined olive oils and virgin olive oils

The other parameters shall comply with the limits fixed in this Regulation.

- Crude olive-pomace oil, refined olive-pomace oil and olive-pomace oil



The other parameters shall comply with the limits fixed in this Regulation.

ANNEX II

Definitions of optional terminology on organoleptic characteristics for labelling purposes

Upon request, the leader of the tasting panel established in accordance with Article 10 of Implementing Regulation (EU)/.... [reference to the Implementing Regulation] may certify that the oils which have been assessed comply with the definitions and ranges corresponding solely to the following terms according to the intensity and perception of the attributes.

Positive attributes (fruity, bitter and pungent) according to the intensity of perception:

Robust, when the median of the attribute is more than 6,0.

Medium, when the median of the attribute is more than 3,0 and less or equal to 6,0.

Delicate, when the median of the attribute is less or equal to 3,0.

Fruitiness: set of olfactory sensations characteristic of the oil which depends on the variety of olive and comes from sound, fresh olives in which neither green nor ripe fruitiness predominates. It is perceived directly and/or through the back of the nose.

Green fruitiness: set of olfactory sensations characteristic of the oil which is reminiscent of green fruit, depends on the variety of olive and comes from green, sound, fresh olives. It is perceived directly and/or through the back of the nose.

Ripe fruitiness: set of olfactory sensations characteristic of the oil which is reminiscent of ripe fruit, depends on the variety of olive and comes from sound, fresh olives. It is perceived directly and/or through the back of the nose.

Well balanced oil: oil which does not display a lack of balance, by which is meant the olfactorygustatory and tactile sensation where the median of the bitter attribute and the median of the pungent attribute are not more than 2,0 points above the median of the fruitiness.

Mild oil: oil for which the median of the bitter and pungent attributes is 2,0 or less.

Terms subject to production of an organoleptic test certificate	Median of the attribute
Fruitiness	
Ripe fruitiness	
Green fruitiness	
Delicate fruitiness	≤ 3,0
Medium fruitiness	$3,0 < Me \le 6,0$
Robust fruitiness	> 6,0
Delicate ripe fruitiness	≤ 3,0
Medium ripe fruitiness	$3,0 < Me \le 6,0$
Robust ripe fruitiness	> 6,0
Delicate green fruitiness	\leq 3,0
Medium green fruitiness	$3,0 < Me \le 6,0$
Robust green fruitiness	> 6,0
Delicate bitterness	≤ 3,0
Medium bitterness	$3,0 < Me \le 6,0$
Robust bitterness	> 6,0
Delicate pungency	\leq 3,0
Medium pungency	$3,0 < Me \le 6,0$
Robust pungency	> 6,0
Well balanced oil	The median of the bitter attribute and the median of the pungent attribute are not more than 2,0 points above the median of the fruitiness.
Mild oil	The median of the bitter attribute and the median of the pungent attribute are 2,0 or less.

ANNEX III

Correlation Table

Implementing Regulation (EU) No 29/2012	Regulation (EEC) No 2568/91	This Regulation	Implementing Regulation (EU)/ [reference to the Implementing Regulation]
		Article 1, point (a)	
			Article 1
			Article 2(2)
Article 1(1)		Article 1, point (b), and Article 1(2)	
Article 1(2)		Article 1, point (b)	
Article 2, first paragraph		Article 4(1)	
Article 2, second paragraph		Article 4(2)	
Article 3, first paragraph		Article 6(1)	
Article 3, second paragraph, points (a) to (d)		Article 6(2), points (a) to (d)	
Article 4(1), first subparagraph		Article 8(1)	
Article 4(1), second subparagraph		Article 8(2)	
Article 4(1), third subparagraph		-	
Article 4(2)		Article 8(3)	

Implementing Regulation (EU) No 29/2012	Regulation(EEC)No2568/91	This Regulation	Implementing Regulation (EU)/ [reference to the Implementing Regulation]
Article 4(3)		Article 8(4)	
Article 4(4)		Article 8(5)	
Article 4(5), first subparagraph		Article 8(6)	
Article 4(5), second subparagraph		Article 8(7)	
Article 4a		Article 7	
Article 4b		Article 5	
Article 5, first paragraph, points (a) to (d)		Article 10, points (a) to (d)	
Article 5, first paragraph, point (e)		Article 11(1) and (2)	
Article 5, second paragraph		-	
Article 5a, first paragraph		Article 11(3)	
Article 5a, second paragraph		Article 11(4)	
Article 5a, third paragraph		Article 11(5)	
Article 6(1), first subparagraph		Article 12(1)	

Implementing Regulation (EU) No 29/2012	Regulation(EEC)No2568/91	This Regulation	Implementing Regulation (EU)/ [reference to the Implementing Regulation]
Article 6(1), second subparagraph		Article 12(2)	
Article 6(1), third subparagraph		Article 3(3)	
Article 6(2), first subparagraph		Article 12(3)	
Article 6(2), second subparagraph		Article 12(4)	
Article 6(3)		Article 12(5)	
-	-	Article 12(6)	
Article 6(4)		-	
Article 7			Article 5(2)
Article 8(1)			Article 2(3)
Article 8(2)			Article 4(3)
Article 8(3)			Article 4(2)
Article 8(4)			Article 4(4)
Article 8a			Articles 2(1) and 4(1)

Implementing Regulation (EU) No 29/2012	Regulation(EEC)No2568/91	This Regulation	Implementing Regulation (EU)/ [reference to the Implementing Regulation]
Article 9(1), first subparagraph			Article 13(1)
Article 9(1), second subparagraph			Article 13(2)
Article 9(1), third subparagraph			
Article 9(1), fourth subparagraph			
Article 9(1), fifth subparagraph			
Article 9(2),first subparagraph			Article 6(1)
Article 9(2), second subparagraph, points (a), (b) and (c)			Article 6(2), points (a), (b) and (c)
Article 9(2), third subparagraph		Article 9	
			Article 6(3)
Article 10, first paragraph, introductory sentence			Article 14
Article 10, first paragraph, points (a) to (d), and second paragraph			

Implementing Regulation (EU) No 29/2012	Regulation(EEC)No2568/91	This Regulation	Implementing Regulation (EU)/ [reference to the Implementing Regulation]
Article 10a			Article 14
Annex I		-	
Annex II		-	
	Article 1(1)	Article 2(1)(a) and 2(1)(b)	
	Article 1(2)	Article 2(1)(c)	
	Article 1(3)	Article 2(1)(d)	
	Article 1(4)	Article 2(1)(e)	
	Article 1(5)	Article 2(1)(f)	
	Article 1(6)	Article 2(1)(g)	
	Article 1(7)	Article 2(1)(h)	
		Article 2(2)	
		Article 3(1) and (2)	
	Article 2(1)		Article 7
	Article 2(1), point (a)		Annex I, point 1
	Article 2(1), point (b)		Annex I, point 2
	Article 2(1), point (c)		

Implementing Regulation (EU) No 29/2012	Regulation(EEC)No2568/91	This Regulation	Implementing Regulation (EU)/ [reference to the Implementing Regulation]
	Article 2(1), point (d)		
	Article 2(1), point (e)		Annex I, point 3
	Article 2(1), point (f)		Annex I, point 4
	Article 2(1), point (g)		Annex I, point 5
	Article 2(1), point (h)		
	Article 2(1), point (i)		Annex I, point 6
	Article 2(1), point (j)		Annex I, point 7
	Article 2(1), point (k)		Annex I, point 8
	Article 2(1), point (l)		Annex I, point 9
	Article 2(1), point (m)		Annex I, point 10
	Article 2(2), first subparagraph and part of point 9.4 of Annex XII		Article 10(1)
	Article 2(2), second subparagraph		Article 11(1)

Implementing Regulation (EU) No 29/2012	Regulation(EEC)No2568/91	This Regulation	Implementing Regulation (EU)/ [reference to the Implementing Regulation]
	Article 2(2), third subparagraph		Article 11(2)
	-		Article 11(3)
	part of point 9.4 of Annex XII		Article 11(4)
	Article 2(3), first subparagraph		Article 3(1)
	Article 2(3), second subparagraph		Article 3(2)
	Article 2(4), first subparagraph		Article 9(2)
	Article 2(4), second subparagraph		Article 9(3)
	Article 2(4), third subparagraph		Article 9(4)
	Article 2(5)		Article 9(5)
	Article 2a(1)		Article 3(1)
	Article 2a(2)		Article 3(3)
	Article 2a(3)		Article 3(4)
	Article 2a(4), first subparagraph		Article 3(5)

Implementing Regulation (EU) No 29/2012	Regulation(EEC)No2568/91	This Regulation	Implementing Regulation (EU)/ [reference to the Implementing Regulation]
	Article 2a(4), second subparagraph		Article 3(2)
	Article 2a(5)		Article 9(1)
	Article 3, first paragraph		Article 13(1)
	Article 3, second paragraph		Article 3(6)
	Article 4(1), first subparagraph		Article 10(1)
	Article 4(1), second subparagraph		Article 10(2)
	Article 4(1), third subparagraph		Article 10(3)
	Article 4(2)		Article 10(4)
	Article 4(3)		-
	Article 6(1)		Article 12(1)
	Article 6(2)		Article 12(2)
	Article 7		
	Article 7a, second paragraph		Article 2(2)

Implementing Regulation (EU) No 29/2012	Regulation(EEC)No2568/91	This Regulation	Implementing Regulation (EU)/ [reference to the Implementing Regulation]
	Article 8(1)		-
	Article 8(2)		Article 14
	Annex I	Annex I	
	Annex XII, point 3.3	Annex II	
	Annex Ia, except for point 2.1		Annex II
	Annex Ia, point 2.1		Article 9(6)
	Annex Ib		Annex III
	Annex III		
	Annex IV		
	Annex VII		
	Annex IX		
	Annex X		
	Annex XI		
	Annex XII, except for point 3.3 and part of point 9.4		

Implementing Regulation (EU) No 29/2012	Regulation(EEC)No2568/91	This Regulation	Implementing Regulation (EU)/ [reference to the Implementing Regulation]
	Annex XV		Annex IV
	Annex XVI		
	Annex XVII		
	Annex XVIII		
	Annex XIX		
	Annex XX		
	Annex XXI		Annex V